

No. 646,539.

Patented Apr. 3, 1900.

S. A. HUNT.
MUSICAL SOUNDING BOARD.

(Application filed Oct. 18, 1899.)

(No Model.)

Fig. 1

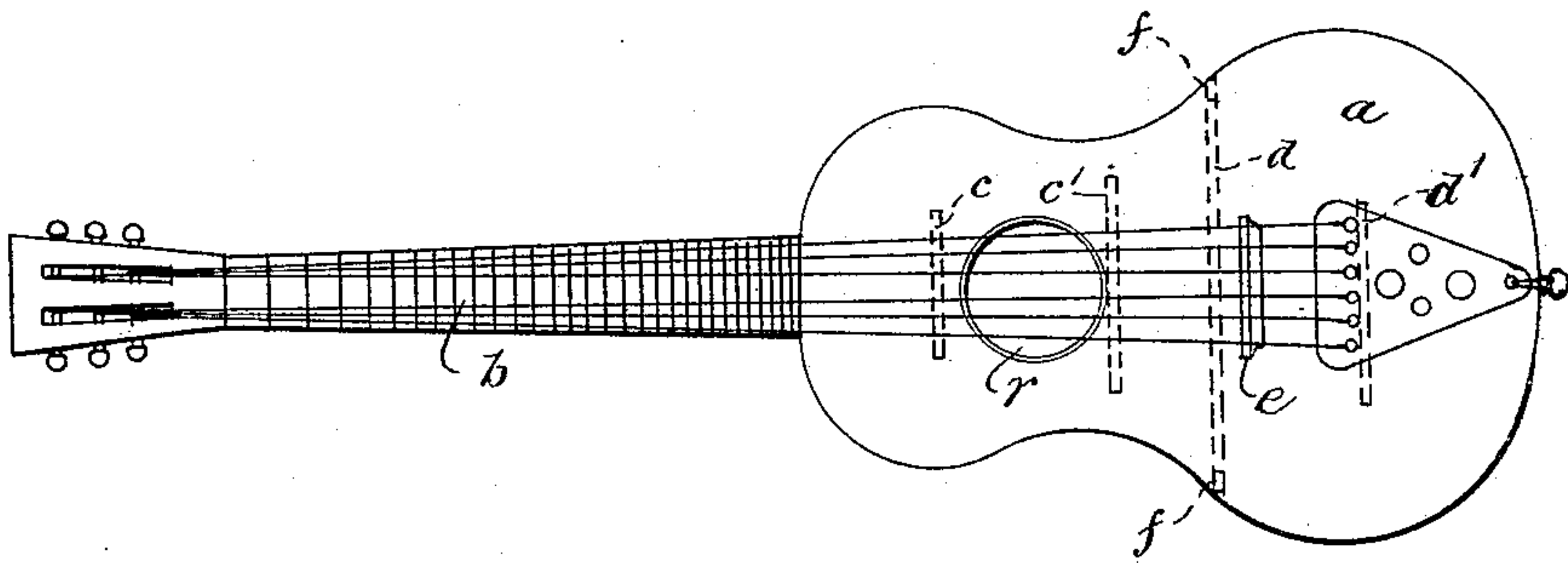


Fig. 2

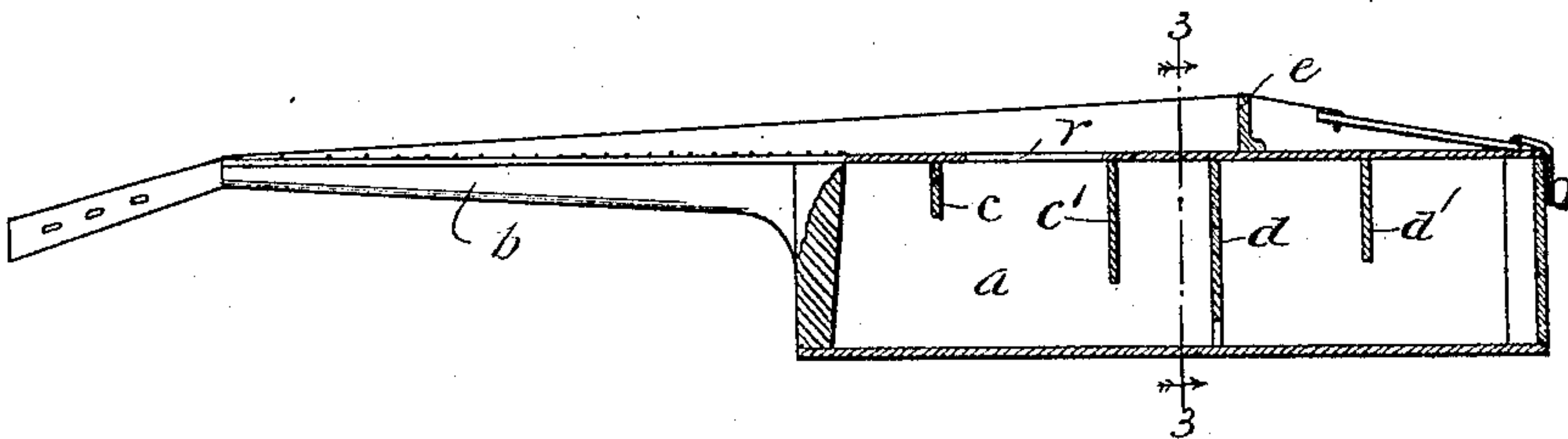
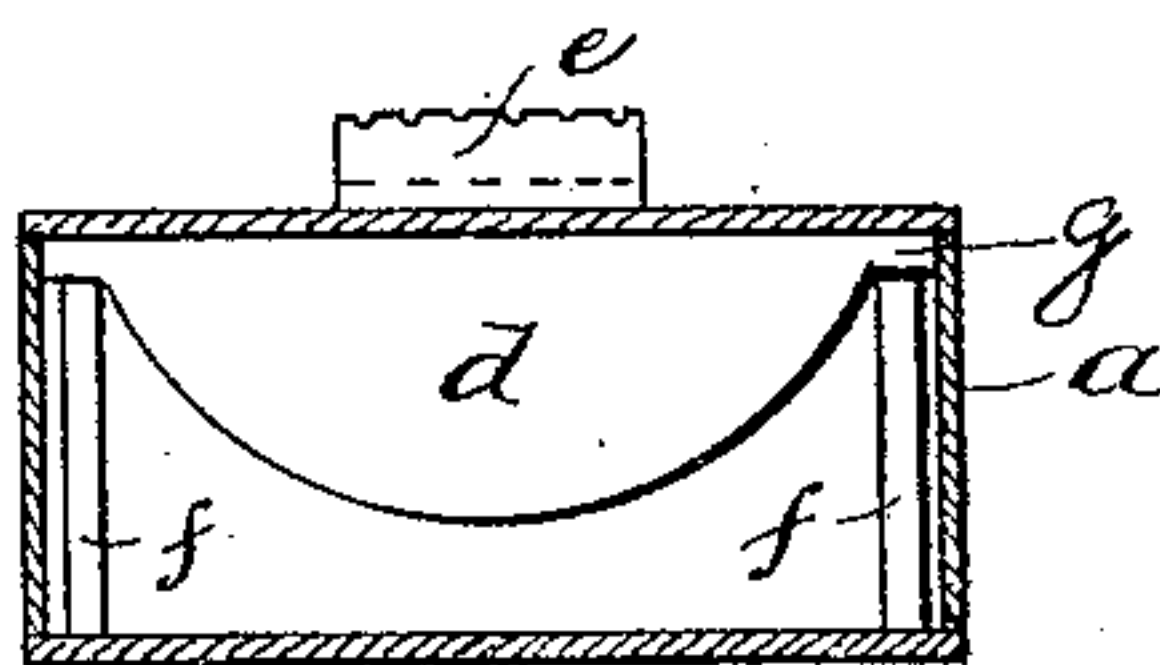


Fig. 3



Witnesses:

G. S. Noble
H. E. Evans.

Inventor,

Silas A. Hunt.
by O. A. Bishop

Att'y

UNITED STATES PATENT OFFICE.

SILAS ARTHUR HUNT, OF CHICAGO, ILLINOIS.

MUSICAL SOUNDING-BOARD.

SPECIFICATION forming part of Letters Patent No. 646,539, dated April 3, 1900.

Application filed October 16, 1899. Serial No. 733,794. (No model.)

To all whom it may concern:

Be it known that I, SILAS ARTHUR HUNT, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and
5 useful Improvement in Sounding-Boards for Musical Instruments, of which the following is a specification.

My invention is related to musical instruments having sounding-boards and strings; and it consists in an arrangement of sub-
10 sounding-boards fixed to either side of a sounding-board at a right angle to its plane; and the objects of my improvement are, first, to increase the volume of sound without af-
15 fecting its quality; second, to soften the tone, so as to produce a singing effect; third, to enable the player to change the tone of his guitar or similar stringed instrument at his will to suit the occasion. I attain these ob-
20 jects by a mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of a guitar, showing the positions of the sounding-boards by broken lines. Fig. 2 is a longitudinal sec-
25 tional view showing the method of fixing the boards as applied to a guitar. Fig. 3 is a transverse vertical section taken on line 3 3, showing the general form of the sounding-boards and the posts *f*, supporting the ex-
30 tremities of the board, not in contact with the sides of the guitar.

Similar letters refer to similar parts throughout the several views.

In referring to the drawings, Fig. 1 shows
35 the top of a guitar with the strings in place.

e is a movable bridge.

a is the sounding-board.

r is the rosette.

b is the handle.

40 The subsounding-boards *c*, *c'*, *d*, and *d'* are made from wood of the same quality as the sounding-board of the instrument to which they are to be applied and the same thick-
45 ness on the straight edge, being slightly tapered toward the lower or curved edge. The lower edge is curved, as shown in Fig. 3 at *d*, and varying in width, *d* being the widest, and provided with a lip *g* at each end. The
50 boards are glued transversely to the under side of the sounding-board, the wider one, *d*, located near the point where the bridge rests.

The next in width, *c'*, is located near the ro-
sette-aperture. The next, *d'*, is located half-
way between the head of the guitar and the
wider board *d*. The board *c* is fixed half- 55
way between the board *c'* and the heel of the guitar. The posts *f* are set with top end against the lips of the board *d*. The lower
ends of the posts rest against the back of the
guitar, supporting the board. The posts *f*, 60
should not be set in contact with the sides of the guitar. The board *d* should extend down to within three-fourths of an inch of the back.

The subsounding-boards take the place of
the ordinary ribs glued to the under side of 65
the sounding-board. Hence the ribs may be entirely dispensed with where the subboards are used in the construction of a guitar or similar instrument.

In playing an instrument fitted with my 70
subsounding-boards the sound-waves set in motion by the sounding-board are intensified by the rigidity imparted to it by the sub-
sounding-boards, they being set at a right
angle to its plane. The boards vibrating in 75
a different angle set in motion a new series of sound-waves, which meet and cross the original sound-waves and blend with them, producing a prolonged soft tone. The tone
may be changed by moving the bridge to and 80
fro until the desired tone appears.

In describing my improvement I have used
a guitar, because its application could be
shown in that instrument best. However, I
do not wish to confine myself to a guitar, as 85
the improvement may be applied to a piano or other stringed instrument by adapting the subsounding-boards to the form of the in-
strument being constructed.

What I claim, and wish to secure by Letters 90
Patent, is—

In a musical instrument having a sound-
ing-board, the combination of the subsound-
ing-boards fixed at a right angle to the plane
of a musical sounding-board, with the sup- 95
porting-posts *f* adapted to rest against the back of a musical instrument substantially as described.

SILAS ARTHUR HUNT.

Witnesses:

JULIA H. BISHOP,

H. E. EVANS.